

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS AND COUNTDOWN PEDESTRIAN SIGNALS AT THE INTERSECTION OF MD 410 (EAST-WEST HIGHWAY) AND MD 212 (RIGGS RD) IN PRINCE GEORGE'S COUNTY. MD 212 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA EIGHT (8) PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR BOTH THE EASTBOUND AND WESTBOUND MOVEMENTS OF MD 410. THE MD 410 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THERE IS EXCLUSIVE LEFT TURN PHASING FOR BOTH THE NORTHBOUND AND SOUTHBOUND MOVEMENTS OF MD 212. THE MD 212 THROUGH MOVEMENTS OPERATE CONCURRENTLY. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED FOR CROSSING THE NORTH AND SOUTH LEGS OF THE INTERSECTION.

THE EXISTING CABINET/CONTROLLER WILL BE UTILIZED. SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. CONTACT MR. ED RODENHIZER AT 410-787-7652 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.

APS OPERATION

- WAIT MESSAGE NORTH LEG - WAIT TO CROSS RIGGS RD AT EAST WEST HWY. CROSSWALK ANGLES LEFT.
- WAIT MESSAGE SOUTH LEG - WAIT TO CROSS RIGGS RD AT EAST WEST HWY.
- WAIT MESSAGE EAST LEG - WAIT TO CROSS EAST WEST HWY AT RIGGS RD.
- WAIT MESSAGE WEST LEG - WAIT TO CROSS EAST WEST HWY AT RIGGS RD. CROSSWALK ANGLES LEFT.
- WALK MESSAGES ALL LEGS - THE WALK MESSAGE SHALL BE RAPID TICK.

PROJECT CONTACTS

The contact persons for District #3 (Prince George's County) are as follows:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: (301) 513-7404

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

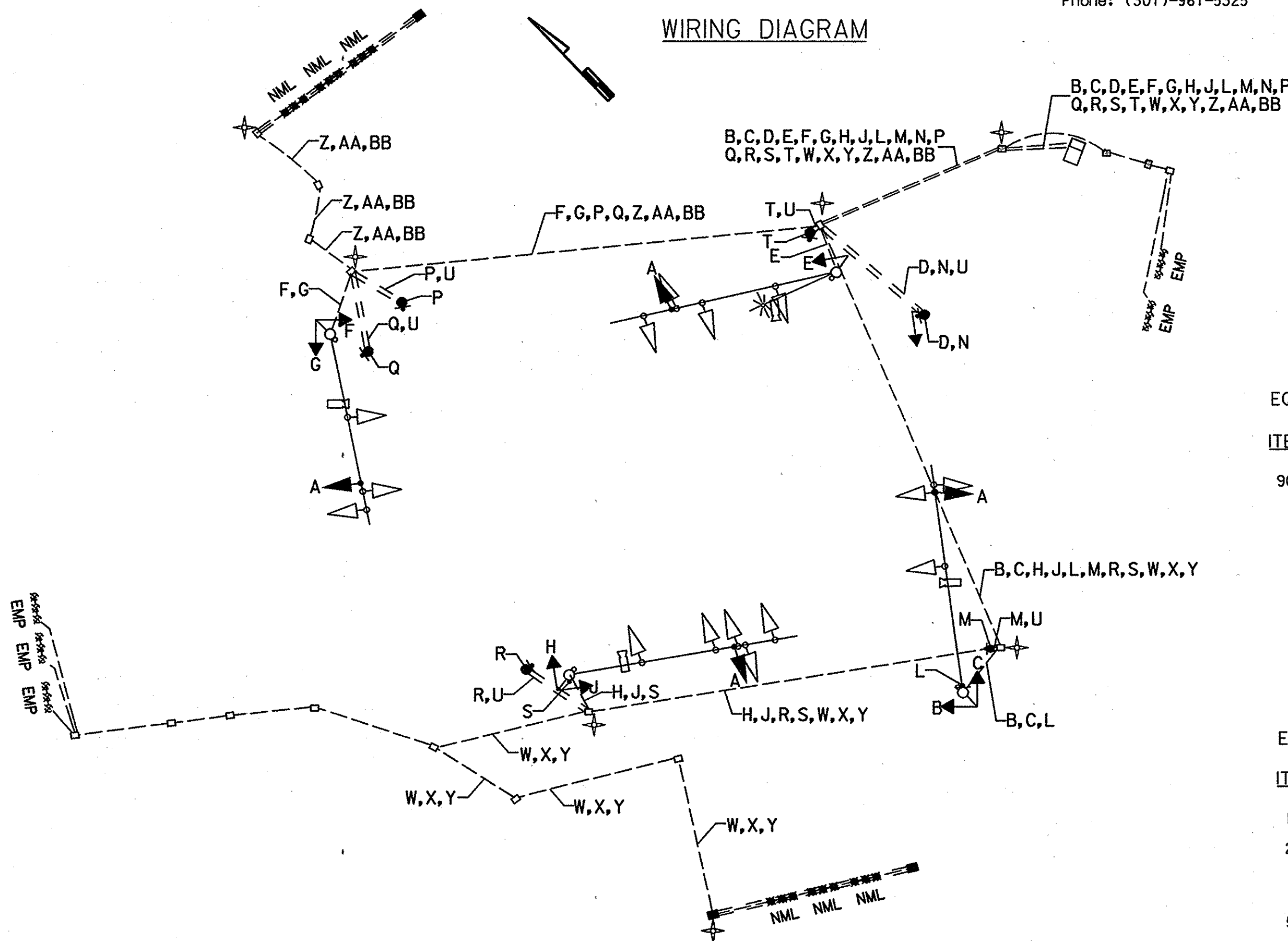
Mr. Ed Rodenhizer
Signal Shop
Phone: (410)-787-7652

The Power Company Representative is:
Potomac Electric Power Company
8300 Old Marlboro, Maryland 20772
Phone: (301)-961-5325

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PHASE 1 AND 5	+G-	+G-	R	R	+G-	+G-	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																							
PHASE 1 AND 6	+G-	+G-	G	G	+R-	+R-	+R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	+Y-	+Y-	G	G	+R-	+R-	+R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	+R-	+R-	R	R	+G-	+G-	G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	+R-	+R-	R	R	+Y-	+Y-	G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	+R-	+R-	G	G	+R-	+R-	G	G	R	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
2 AND 6 CHANGE	+R-	+R-	Y	Y	+R-	+R-	Y	Y	R	R	R	R	R	R	R	FLOW	FLOW	FLOW	FLOW	DW	DW	DW	DW
PHASE 3 AND 7	+R-	+R-	R	R	+R-	+R-	R	R	+GR	+GR	R	+GR	+GR	R	DW	DW	DW	DW	DW	DW	DW	DW	DW
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8																							
PHASE 3 AND 8	+R-	+R-	R	R	+R-	+R-	R	R	R	R	R	+GG	+GG	G	DW	DW	DW	DW	DW	DW	DW	DW	DW
3 AND 8 CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	R	R	R	+YG	+YG	G	DW	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 7	+R-	+R-	R	R	+R-	+R-	R	R	+GG	+GG	G	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 7 CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	+YG	+YG	G	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8 ALT	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK	WK
PED CLEARANCE	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FLOW	FLOW	FLOW	FLOW	FLOW
4 AND 8 ALT CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



- A - EXISTING CABLE TO BE UTILIZED
- B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, W, X, Y, Z, AA, BB - ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
- L, N, P, Q, R, S - ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
- U - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- NML - NON-INVASIVE MICROLOOP PROBE
- W, X, Y, Z, AA, BB - MICROLOOP PROBE LEAD-IN CABLE
- EMP - EXISTING MICROLOOP PROBE
- ⊕ - EXISTING GROUND ROD

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

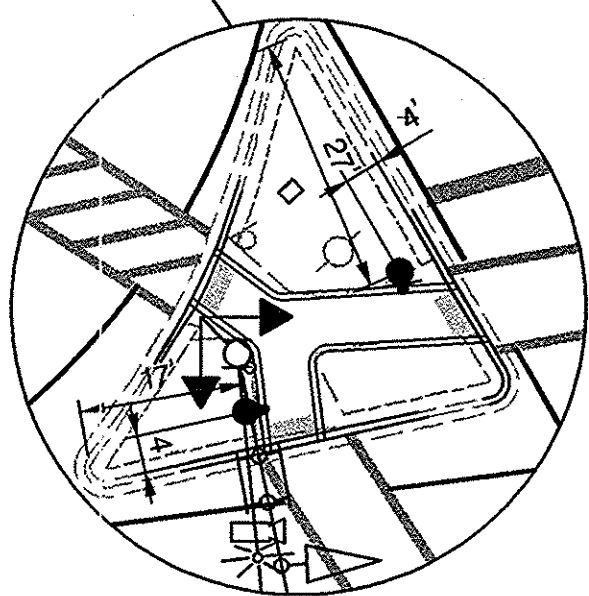
ITEM NO	QUANTITY	DESCRIPTION
900000	8 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
	4 EACH	R10-30(1) (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS EAST-WEST HWY."
	4 EACH	R10-30(1) (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS RIGGS RD."

EQUIPMENT LIST 'B'

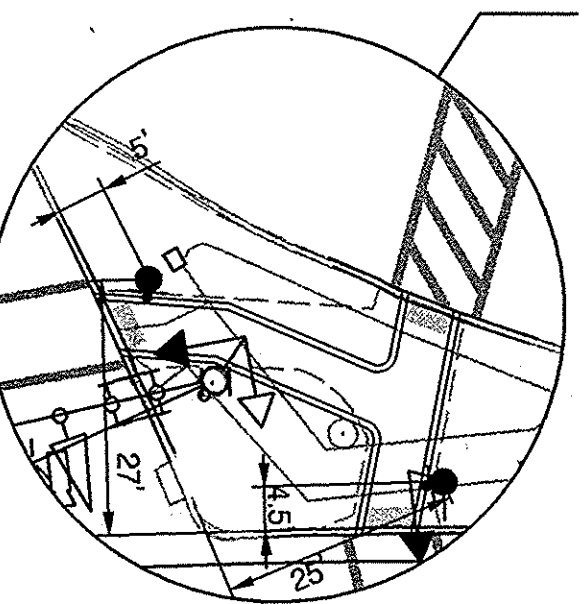
EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
120500	1 EA	MAINTENANCE OF TRAFFIC
203030	6 CY	TEST PIT EXCAVATION
585621	1140 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	200 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
800000	8 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
800000	8 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
800000	1 EA	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
800000	1 EA	2 WIRE CENTRAL CONTROL UNIT
801004	1 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	100 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
805135	130 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT UP - TRENCHED
805150	120 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT UP - SLOTTED
810601	3 EA	NONINVASIVE DETECTOR, 500 FOOT LEAD IN CABLE
810605	3 EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
811001	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	8 SF	INSTALL OVERHEAD SIGN
818004	6 EA	10 FOOT BREAKAWAY PEDESTAL POLE
860265	4 EA	RELOCATE EXISTING SIGNAL HEAD
860292	5 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	1410 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	1980 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

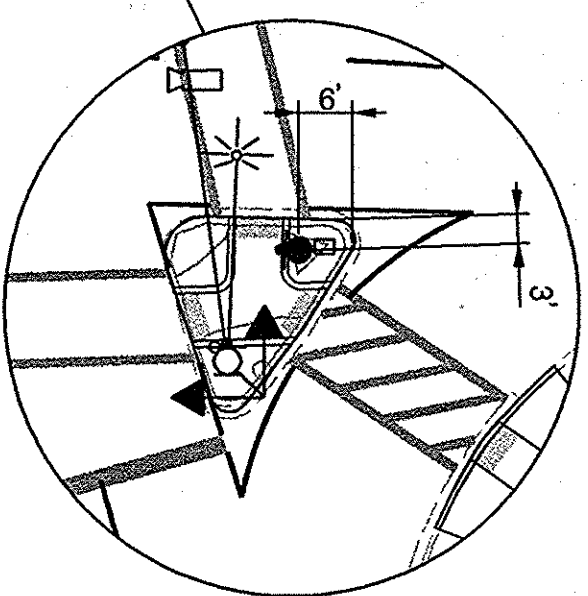
NORTH-EAST ISLAND
SCALE: 1" = 20'



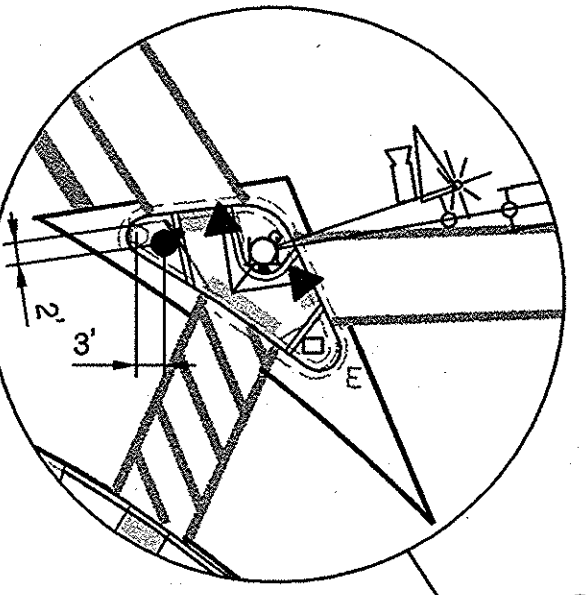
NORTH-WEST ISLAND
SCALE: 1" = 20'



SOUTH-EAST ISLAND
SCALE: 1" = 20'



SOUTH-WEST ISLAND
SCALE: 1" = 20'



EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.



RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 212 (RIGGS ROAD) AT MD 410 (EAST-WEST HIGHWAY)

GENERAL INFORMATION SHEET

SCALE	NTS	DATE	12/20/07	CONTRACT NO.	PG5715177
DESIGNED BY	JCS	COUNTY	PRINCE GEORGE'S		
DRAWN BY	JCS	LOGMILE	16021201.26		
CHECKED BY	BAB	TIMS NO.	1601		
FAP NO.	SEE TITLE SHEET	TOD NO.			
TS NO. 1778D-GI	DRAWING	SG-02	OF 02	SHEET NO.	OF

PLOTTED: 8/24/2007
FILE: 3015

BY: JS/ERNAMES